

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FILING DATE FIRST NAMED INVENTOR		CONFIRMATION NO.		
09/931,185	08/15/2001	Brian Bramlett	5038-75 1411			
759	90 07/22/2004	EXAMINER				
MARGER JOHNSON & McCOLLOM, P.C.			KIM, PETER B			
1030 SW Morris		ART UNIT	PAPER NUMBER			
,			2851			
			DATE MAILED: 07/22/2004	DATE MAILED: 07/22/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	Application No. Applicant(s)					
		09/931,18	5	BRAMLETT ET AL.				
	Office Action Summary	Examiner		Art Unit				
		Peter B. K	(im	2851				
Period fo	The MAILING DATE of this communication app			orrespondence ad	Idress			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
2a)⊠	Responsive to communication(s) filed on <u>03 June 2004</u> .  This action is <b>FINAL</b> . 2b) This action is non-final.  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims							
5)□ 6)⊠ 7)□	4)  Claim(s) 1-10,14-19 and 21-25 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5)  Claim(s) is/are allowed.  6)  Claim(s) 1-10,14-19 and 21-25 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/or election requirement.							
Applicati	on Papers							
<ul> <li>9) The specification is objected to by the Examiner.</li> <li>10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</li> <li>11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.</li> </ul>								
Priority u	ınder 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>								
	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)		4) Interview Summary Paper No(s)/Mail Da					
3) 🔲 Inform	nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	)	5) Notice of Informal Pa		D-152)			

Art Unit: 2851

#### **DETAILED ACTION**

Applicant's arguments filed on Nov. 4, 2003 have been fully considered.

### Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 23 and 25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. A light projection apparatus with two patterning means for two different light paths is new matter. The apparatus with automatically adjustable mirror is new matter.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 11-13, 18-22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faris et al. (Faris).

Art Unit: 2851

Faris discloses in fig. 10A, a light projection apparatus and method with a light source (95), a dynamic patterning means, (10") LCD matrix, interposed within the light path. Faris discloses a mirror (105) having central axis at an oblique angle to the light and means for tilting the mirror. Although, Faris doe not disclose a steering means, it is well known overhead projectors have image projection head (99) which is tiltable so that the light pattern can be directed in a desired direction including first and second directions. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide an image projection head which can be tilted in order to direct the light to a desired direction.

Claims 2-9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faris et al. (Faris) in view of Mueller et al. (Mueller).

Faris discloses the claimed invention as discussed above. However, Faris does not disclose using LEDs. Mueller discloses in the abstract and in col. 2, line 63 – col. 3, line 60, a light projection apparatus and method using LEDs of different lights as the light source. Mueller also discloses controlling intensity of different colored LEDs independently of one another (col. 3, lines 15-65). Although Faris does not disclose selectively actuating pixels of transmissive LCD matrix, such function is inherent for LCD matrix. LCD matrix allows control of the pixels to form images and selectively allow light to pass. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide the LEDs of different color to the invention of Faris in order to obtain colorful images as taught by Mueller in col. 2, lines 5-10.

Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faris et al. (Faris) in view of Mueller et al. (Mueller).

Faris discloses in fig. 10A, a light projection apparatus and method with a light source (95), a dynamic patterning means, (10") LCD matrix, interposed within the light path. Faris discloses a mirror (105) having central axis at an oblique angle to the light and means for tilting the mirror. Although Faris does not disclose selectively actuating pixels of transmissive LCD matrix, such function is inherent for LCD matrix. LCD matrix allows control of the pixels to form images and selectively allow light to pass. Although, Faris doe not disclose a steering means, it is well known overhead projectors have image projection head (99) which is tiltable so that the light pattern can be directed in a desired direction including first and second directions. Faris also does not disclose using LEDs. Mueller discloses in the abstract and in col. 2, line 63 – col. 3, line 60, a light projection apparatus and method using LEDs of different lights as the light source. Mueller also discloses controlling intensity of different colored LEDs independently of one another (col. 3, lines 15-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide the LEDs of different color to the invention of Faris in order to obtain colorful images as taught by Mueller in col. 2, lines 5-10 and to provide an image projection head which can be tilted in order to direct the light to a desired direction.

## Response to Arguments

In response to the arguments, the Wakebe reference is withdrawn.

Applicant argues that Farris does not teach steering means for directing the light pattern because the pattern is intended to be projected onto screen for viewing not for disco

environment. However, in order to project the pattern onto the screen, the steering means is necessary. Sometimes the pattern is too high, too low or too far to the sides. In such instances the steering means is used, as in all overhead projectors, to place the pattern in the center of the screen.

Applicant also argues that all overhead projectors use a white lamp, however, LED lights of plurality of colors can be used to project images as well known in the art.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Suzuki (US 5,122,831) and Saita (5,663,782) are included to show that it is obvious to replace a white light with an LED light. Peterson (5,245,370) is included to show steering means on an overhead projector.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Application/Control Number: 09/931,185 Page 6

Art Unit: 2851

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter B. Kim whose telephone number is (571) 272-2120. The examiner can normally be reached on 8:30 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Peter B. Kim
Primary Examiner
Art Unit 2851

July 20, 2004